

**Caution:** The expansion cage and the expansion cards that it contains are not hot-pluggable. To avoid damage to equipment and possible loss of data, make sure that the library is properly powered down, as described in Step 1, before proceeding.



**Caution:** Parts can be damaged by electrostatic discharge. Keep parts in their containers until needed. Make sure that you are properly grounded when touching static-sensitive components.

This document explains how to replace the CompactFlash memory card on the Interface Manager card that is installed in an HP StorageWorks ESL9000-Series tape library.



**Caution:** This procedure will cause all Interface Manager card configuration settings to be lost. You must reconfigure the Interface Manager card after replacing the CompactFlash card. These configuration settings are listed in the "Initial configuration steps" section of the *HP StorageWorks Interface Manager and Command View ESL User Guide*. If possible, write down all of the current configuration settings from the Interface Manager card before replacing the CompactFlash card.

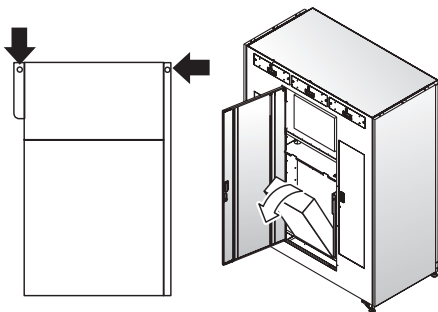
1

Power off the ESL9000 Series library.

- Press **Standby** on the front control panel of the library to place the library off-line. Verify that the control panel indicates System Off-line.
- Check the **Overview** screen of the control panel to verify that the gripper is empty. If there is a tape cartridge in the gripper, perform a move command to place the cartridge in an available storage bin.
- Switch off the power switch located below the control panel.

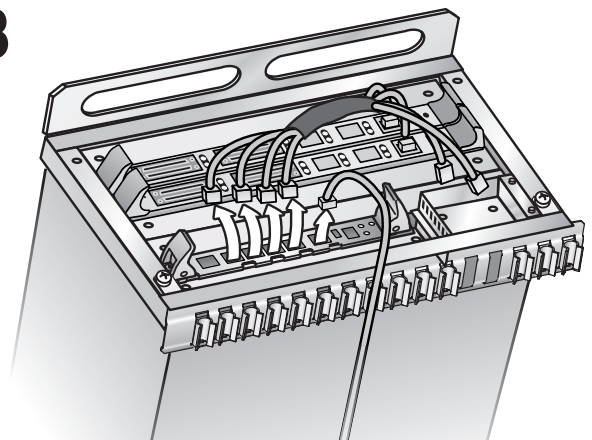


2



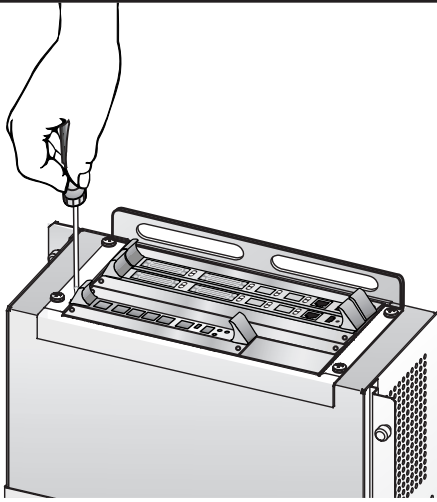
Open the center back access door or the right back access door of the library, depending on the model. Turn off both circuit breakers on the AC power distribution assembly, located in the base of the library cabinet behind the rear access panel. Loosen the two captive screws at the top of the electronics bay frame and carefully tilt the electronics bay outward.

3



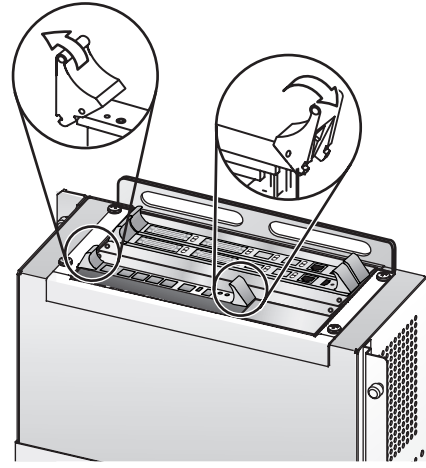
Make a note of where each cable is connected, and then disconnect all cables from the Interface Manager card.

4



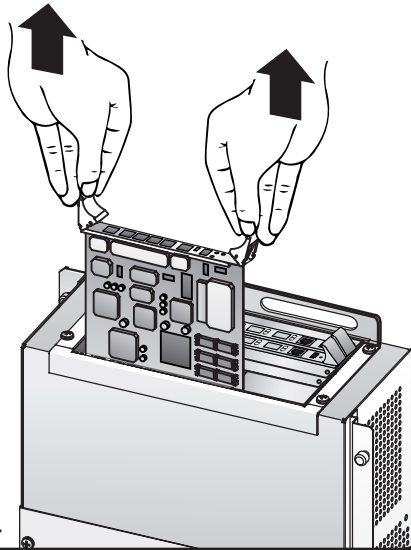
Loosen the captive screws securing the Interface Manager card.

5



Push the ejector handles on the existing Interface Manager card outward.

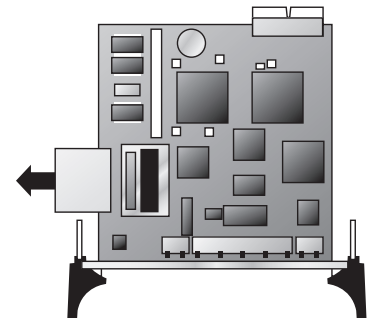
6



Grasp the ejector handles and pull up on the Interface Manager card until the card clears the expansion cage. Set this card on a stable work surface.

7

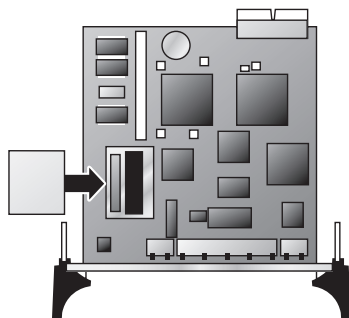
### Replacing the CompactFlash Card



Position the existing Interface Manager card battery-side up to access the CompactFlash card.

Grasp the edges of the CompactFlash card and slide it out of the flash memory slot. If needed, push a pen into the corner notches of the flash memory slot to unseat the CompactFlash card.

8



Remove the replacement CompactFlash card from its protective sleeve and place it on your work surface.

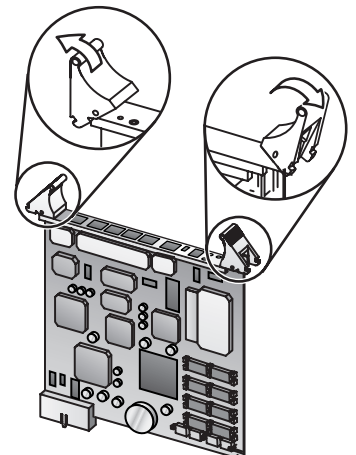
With the connector going in first, align the sides of the CompactFlash card with the flash memory slot on the Interface Manager card. Gently slide the CompactFlash card into the slot until it is securely seated.



**Note:** If the CompactFlash card does not slide in easily, the card is upside down. Pull the card back out, turn it over, and reinsert it into the slot.

9

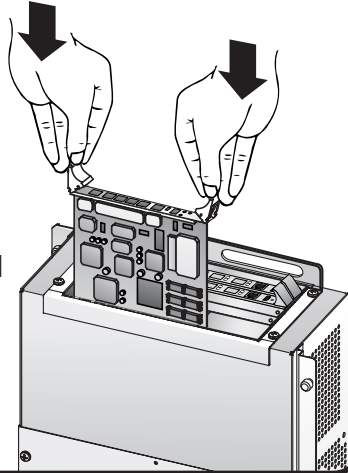
### Reinstalling the Interface Manager Card



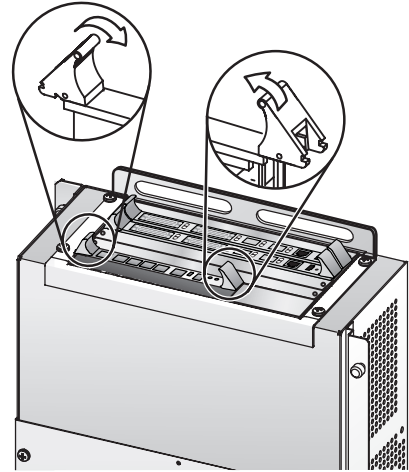
Push the ejector handles outward.

# 10

Align the sides of the Interface Manager card with the guides in the designated slot in the expansion cage. Gently push the Interface Manager card into the expansion cage slot, making sure that the alignment pin on the card aligns with the alignment hole in the slot. Push the card until the ejector handles engage the metal rails on the top of the cage.

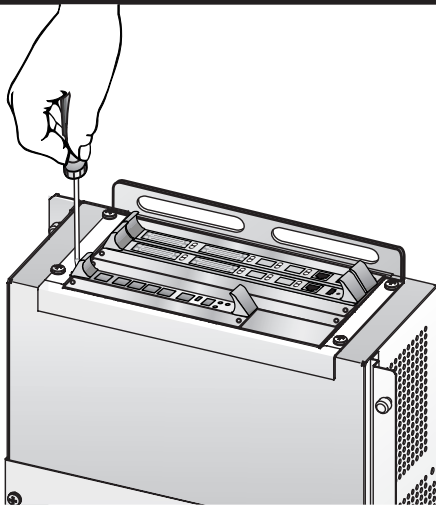


# 11



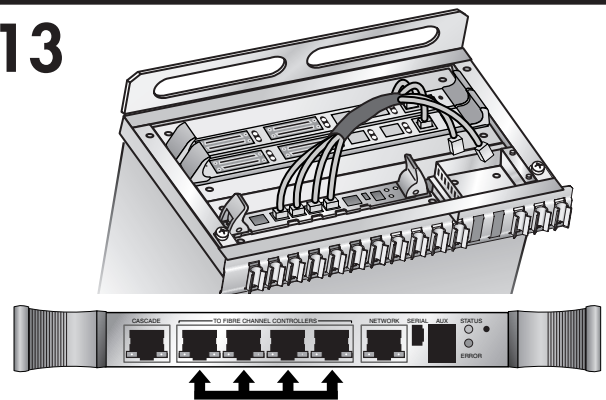
Push the ejector handles inward to lock the card in place.

# 12



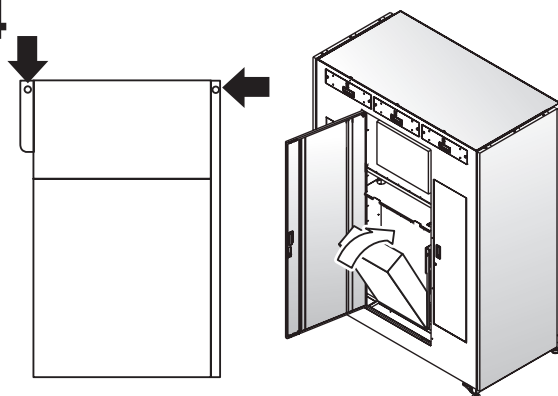
Tighten the captive screws to secure the Interface Manager card into the expansion cage.

# 13



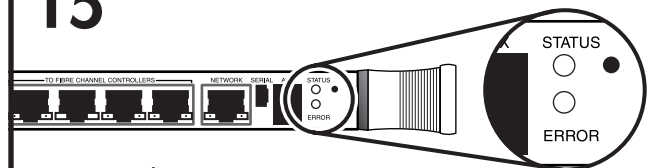
Reconnect the four connectors from the Ethernet cable bundle to the four Ethernet ports labeled "To Fibre Channel Controllers" on the Interface Manager card. Reconnect the cables in the same order that they were connected to the original Interface Manager card.

# 14



Verify that filler panels are installed in all unused slots in the expansion cage. Push the electronics bay back into the library cabinet and finger-tighten the two captive screws to secure the electronics bay in place.

# 15



Power on the ESL9000 Series library using the following sequence:

- Turn on both circuit breakers on the AC power distribution assembly.
- Turn on the power switch located below the control panel.

Verify that the status LEDs indicate a normal state. For a description of LED diagnostic codes, refer to the "Troubleshooting" chapter of the *HP StorageWorks Interface Manager and Command View ESL Installation Guide*.

After replacing the CompactFlash card, you must update the Interface Manager firmware and reconfigure the Interface Manager settings. To update the firmware:

1. Acquire the latest firmware file from:  
<http://www.hp.com/support/cvesl>
2. If necessary, transfer the firmware file to a client PC or laptop that will be used in step 3 to connect to the Interface Manager card.
3. Use ftp to transfer the firmware file to a temporary storage area in the Interface Manager card's memory.
  - a. Connect a host PC or laptop to the Cascade port of the Interface Manager card using an Ethernet cable.
  - b. On the host PC or laptop, open a command shell and navigate to the directory that the firmware you downloaded in step 1 is located.
  - c. Enter the following command: `ftp 192.168.2.1`
  - d. Login with the following credentials:
    - User name: `ftp`
    - Password: Use your e-mail address
  - e. If necessary, use the `ls` command to list the contents of the `ftp` directory.
  - f. Enter the following command to turn on binary transfer mode: `bin`
  - g. Enter the following command to copy the firmware file to the temporary location in the Interface Manager card's memory:  
`put <filename>`  
where `<filename>` is the filename of the firmware file.
  - h. Use the `quit` command to logoff the ftp session.
4. Start a Telnet session on the PC or laptop that is connected to the Interface Manager card via the cascade port:
  - a. From a command prompt, enter the following:  
`telnet 192.168.2.1`
  - b. At the login prompt, enter the following information:
    - Username: `cliadmin`
    - Password: `clipwd`
5. Enter the following command to update the firmware:  
`download mgmt`
6. Set the Interface Manager card IP address to the same address it had before replacing the CompactFlash card. To set the IP address enter the following command:  
`set network ipaddress <IP address>  
<subnet mask> <gateway address>`
7. Logoff the telnet connection and disconnect the host PC or laptop from the Cascade port of the Interface Manager card.
8. If necessary, reconnect the cables to the Interface Manager card exactly as they were before.
9. Refer to the "Initial configuration steps" section of the *HP StorageWorks Interface Manager and Command View ESL User Guide* for instructions on how to reconfigure the Interface Manager card. Because configuration information is stored on the CompactFlash card, the previous configuration is lost when the CompactFlash card is replaced.

Verify that all access panels are closed, all back panel cable connections are firmly in place, and all doors are closed.

